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Content:

METHODS OF SELECTION OF THE SAMPLE AND HIS FUNCTION IN THE AUDIT OF THE FINANCIAL REPORT

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Abstract

The increasing scope of activities to be carried out by the auditor in the audit process, imposes the need to use the sampling method to obtain sufficient and adequate evidence for issuing an opinion on the truthfulness and accuracy of the information presented in the financial reports. In order to obtain confidential and relevant evidence, the sample serves as the most useful solution on the basis of which the entire population of accounts and groups of transactions is studied.

During the audit process, the auditor performs its activities on the basis of a selected sample of items and transactions. The application of the sample method enables the auditor to evaluate the evidence for any of the items, thus making a conclusion as to the population from which the sample was taken. The sample should have the same characteristics as the population from which it was derived, that is to represent a population of the population, and be of a size sufficient to be representative.

The use of the sample method as a tool in the implementation of the audit process is widely used by the auditors, facilitating their work, no matter what type of audit is conducted and what the object of the analysis is. This method saves time, effort, money, and resources of auditors while researching, while at the same time enabling them to build a high-quality, and credible opinion of the information provided in the financial statements.

Keywords: audit, sample, population, auditor, results, risks, testing

Introduction

Due to the size of the audited entities and the volume of financial transactions, it is not possible to perform a one hundredth revision of all items and transactions. In order to carry out the audit process, the auditor applies independent audit tests (control tests, analytical procedures, tests of transaction details and balances details), as tools that are inevitably performed using the sampling method (sampling of the population - the documents), which is proving to be an economical, effective and efficient method when performing the audit. Independent audit tests are performed in the function of the implementation of the fundamental concepts of the audit (the concept of materiality, audit risk and audit evidence).

Because it is not possible to revise all items and transactions during the audit, but only part of them, in terms of saving time, funds and expertise, the sample method finds great application in the implementation of the audit process. The results obtained by applying the sample method allow the audit opinion to be with reasonable certainty and assurance that the statements in the financial reports do not contain material misstatements, while allowing for the simultaneous implementation of cost-effective, efficient and effective audits.

1. Statistical non-statistical sample

Both the statistical and the non-statistical sample have advantages and disadvantages. The advantage of the statistical sample is the possibility to determine the minimum size of the sample, or the possibility of quantitative expression of the results. The risk of applying the statistical sample can be quantified and can be objectively evaluated and controlled, therefore determining the size of the sample requires specifying a certain level of confidentiality and degree of precision. Regarding the shortcomings, the statistical sample has a disadvantage, as the techniques used can give an ineffective result. For example: the use of a random sample technique can lead to an unsuccessful result, since such procedures are longer. The auditor, in selecting the sample, may have problems establishing a correlation between the table or the computer output of the random numbers and the population. If appropriate audit software was applied, the cost of statistical samples would be reduced.

Before deciding on the auditor, whether to use the techniques of the statistical sample, he must make an analysis concerning the costs of determining the size, extracting the sample of the population, and evaluating the results using the appropriate formulas. The statistical sample can precisely quantify and control the risk, which is caused by the selection and use of the sample.

In non-statistical techniques, mathematical way to determine the size of the sample the decision to select a sample depends solely on the subjective attitude of the auditor. He should determine whether he approaches typical elements or for detective choice. The use of a non-statistic sample depends on the auditor's ability and experience, from his prior experience in the client's audit activity, the knowledge of the client's work, and so on. The advantage of using non-statistical procedures is the economy and in terms of analysis, they are a more economical solution. The lack of objectivity is due to the lower objectivity, due to the subjective attitude of the auditor, because it depends on the auditor's decisions, as well as because of the lack of a mathematical way to determine the size of the sample.

2. Determination of the sample

In audit theory and practice, as far as the determination of the sample is concerned, there are several methods and techniques. In MRS 530 - Using a sample in the audit, the factors that must be taken into account when defining, selecting the sample and using are precisely defined:

- The objectives of the audit,
- The population,
- Stratification,
- The size of the sample,
- the risk of using the sample,
- Maximum acceptable error and
- Expected errors in the population.

Audit Objectives. When defining the sample, the most primitive auditor should determine the objectives of the audit, and then determine the procedures, the combinations of procedures, through which the most determined and most effective achievements of the predetermined goals will be achieved. After defining the objectives, the auditor should begin to determine the techniques and methods for sample selection [1].

Population. The population is made up of a mass of data, which, further, the auditor, in achieving the goals of the audit, groups them in a sample to draw the final conclusions for the entire mass of data. Above all, it may be important for the auditor to determine if the population meets the objectives, in particular, the population should be accurately identified as one mass of data.

Stratification. Stratification is the division of the population into multiple subgroups called stratum, so the auditor, to determine the size of the sample, stratifies the population. Such stratums can be distinguished and the results separately evaluated or combined to provide a real basis for assessing the characteristics of the entire population [2].

Sample size. In audit practice, it has been proven that the entire population survey provides excellent results because it offers the most reliable evidence to make the audit successful, but given that there are customers with a large number of events and transactions, this leads to uneconomical performance. For this reason, the number of items in the population should be accurately determined. Some auditors start from the theory of a magic number, for example, selecting 40 items. Auditors must be careful when selecting items, because the magic number may not necessarily meet the needs for providing proof material.

Risk of using a sample. The risk is associated with the use of a sample associated with the auditor's ability to differentiate the conclusion based on the sample from the conclusion it would have made in the case of implementing the procedures of the whole population. To verify the estimated control risk at a lower level than possible, the auditor identifies controls that will detect and detect material errors in the statements. Therefore, it is necessary to carry out tests to assess the functioning of the control system [3].

Maximum acceptable error. In fact, it is the biggest mistake present in the population, based on the results obtained from the sample. The maximum acceptable error should be determined at the planning stage of the procedures and the determination of the sample, and depends on the auditor's position on the materiality of individual accounts in the financial reports.

An expected error in the population. When the auditor expects an error in the population, he will also predict a larger sample for testing, for the error contained within the population to move within the planned level. While a smaller sample for testing, the auditor predicts when he does not expect any errors and omissions in the population [4].

3. A sample test sample

Auditors usually do not review all the information they have at their disposal to form their own opinion. Usually it is impractical for the following reasons:

- The cost of checking 100% of transactions, in terms of audit resources, would be excessively high,
- A complete check would take so long that the financial reports will become obsolete even before they see users,
- Good conclusions can be obtained using the sample testing method.

Basically, sample-based testing is a process through which, with small checks, one can find out a lot. At the same time, by selecting samples, the auditor must accept the risk that the selected

sample may not give a true picture of the whole set of data, that is, that the characteristics that are drawn as a conclusion from the sample are not the same as those that would be obtained if tested and tested the whole group or some special sample [5].

The audit method of testing a sample means drawing conclusions for a whole set of data by testing one representative sample from the group. The group of data that can be represented through debtor balances, inventories, creditors or transactions, such as payments to suppliers or employees or other financial expenses, is called a group (population). The individual items that make up the group are called units of the sample [6].Testing the sample itself is not enough. It is only a means of fulfilling a particular goal. The sample and the results of testing it are only raw data, which must be evaluated and reviewed, the data must be analyzed in terms of materiality, causes, real and potential effect. The sample is only the first step towards a well-established and based audit opinion. General audit software and other techniques may assist the auditor in a more efficient way to audit 100% of the population, but not to select the right sample and to audit it [7]. This is especially true in all cases where the organization has full documentation in electronic format.

With the growing use of information technology, the auditor must decide whether the sampling method is the most efficient and effective way to provide audit evidence. With the existence of enormous databases and various possibilities for compiling the necessary information in a different format, in some cases it may be more effective to conduct computer-assisted testing of the entire population. Taking into consideration that today the software covers the overall activities of enterprises and the existence of integrated software, the auditor, instead of selecting a sample of the population, can decide to test all 100 percent of the entire population [8]. In some cases, however, a 100% check is required. These include extraordinary or extraordinary items, such as large amounts based on penalties, categories that are scarce but of great importance, such as land and buildings, categories of special importance, such as loans to directors or other high-risk areas.

4. Techniques for determining a sample for testing

There are several different techniques for obtaining a representative sample:

- Selecting a sample using a random number table,
- Selecting a sample with computer generated numbers,
- Systematic selection of sample,
- Random systematic sample selection,
- Sample selection based on the proportional probability of size,
- Choosing a Hazardous Sample, and
- Select a stratified sample

4.1. Sample selection using a random number table

This technique consists of the following:

A.) the relationship between the random numbers in the table and the population's items should be defined. If the population has a certain number of items, then random numbers smaller than or equal to that of the items contained in the population should be required. All larger numbers are excluded. Only one item must match each random number, so the connection should be unique.

B.) the auditor should determine the direction of the selection of random numbers across the table (may be horizontal or vertical, from top to bottom or vice versa, left to right or vice versa) that must be followed until he selects all the necessary random numbers, and does not specify the stark dot to generate the same sample. The starting point can be selected by accidental fits. In order to avoid the occurrence of a human error, the complexity and direction of choice should not be very complex.

C.) after the selection of the sample has been completed, the endpoint should also be defined so that, if necessary, it is possible to facilitate the addition of new items, that is, the continuation of the procedure for selecting the random numbers [9].

4.2. Select a sample with computer generated numbers

The selection of the sample with the help of a computer gives much better results, in terms of errors that may occur, that means errors are reduced, the procedure is much shorter. This method makes it easy to select the items in the sample, in that the random number generation program specifies the size of the population in order to choose only those random numbers corresponding to the size, the choice is made by the computer and thus a more successful choice, reduces the occurrence of a human error. To ease the choice of the sample, many audit firms have built-in audit software audit packages that include such a random number selection generator [10].

4.3. Systematic sample selection

This sampling technique is a lightweight technique, but there is one disadvantage that can generate a biased glitch, thereby reducing the representativity. To use this technique: the population should be sorted in random order and use more random beginnings to reduce the possibility of bias.

The systematic selection of the sample is carried out in several stages:

A.) determine the sample interval - I which is determined as the quotient of the size of the population - N and the sample size - n, i.e. $I = N / n$,

B.) choose a random start or more random beginnings as first elements and select each "I " item, for each " Ik" item of the corrected interval,

C.) the procedure continues until the population is exhausted, that is, until the number of the last selected item, increased with the interval, is no greater than the number of the last item of the population.

4.4. Random systematic sample selection

This technique is a combined technique from random numbers and systematic selection, and more is accidental than systematic selection.

4.5. Sample selection based on the proportional probability of size

This technique is based on random currency (denar) and not on a random selection of units, which means that each registered denar in the population has the same chance to be chosen, but does not mean that any transaction or account is likely to be selected. The choice of random

currency (denar) can be done with a computer generator and a table, but the most commonly used random choice is in a few steps:

A.) the sample interval is calculated by dividing the total number of denar in the population, with the number of items, I = V / N,

B.) a random starting currency (denar) is selected in the interval from 1 denar to the amount of the interval of the sample, so a cumulative table is made starting from the first unit in the population until the last,

C.) the first incidental item will be the one containing the random starting currency (denar), increased by the interval of the sample.

4.6. Choosing a Hazardous Sample

Unlike previous techniques that can be used both in statistical and non-statistical methods of sampling, this technique for selecting a random sample is used in the selection of a non-statistical sample. In this technique there is no reason for the inclusion or discharge of individual items of the sample, it is performed without a conscious bias.

In the Hazardous Choice, the choice is not to be dependent on the personal preferences of the auditor, in the sense of favoring individual items for a particular location on each side, or never to select the first or the last item in the list. Hazardous selection is selected because the auditor plans to perform an approximate random selection [11]. Hazardous sample selection is not used in statistical sampling methods, because the probability of selecting an individual item in the sample can not be calculated, but that does not mean that it is not used in non-statistical methods.

4.7. Choosing a stratified sample

Stratification improves the design efficiency of the sample, the use of a smaller sample is achieved in order to achieve the planned level of risk arising from the use of the sample, because when homogeneous items are grouped together then the efficiency and effectiveness of the sample increases.

Stratification can be effectively used to ensure the representativeness of the sample both in statistical and non-statistical applications of the sample. The size of the sample depends on the auditor's assessment of the risk of irregularities associated with a stratum, in particular, in those stratum where the auditor has assessed a higher level of risk, a greater number of items should be collected

5. Risk of using a sample in tests of control

The auditor, before starting to determine the sample and testing the controls, should determine the acceptable level of risk for assessing the control risk at a lower level. Typically, audit standards propose to be in the range of 5 to 10% as the most acceptable solution. The auditor's decision to accept 5% as an acceptable level actually means 5% mistrust to accept the client's control system as effective. And this would mean that the auditor accepts 95% confidence as a security for the correctness and truthfulness of the functioning of the internal control of the client. The higher risk of the assessed control risk at a lower level is the selection of a smaller sample, as the ever-higher risk suggests that the sample is representative of the population. That means a smaller amount of evidence collected during the audit process always entails a higher level in assessing control risk.

In planning the sample to test controls, the auditor should pay attention to:

1. The relationship between the sample and the purpose of the tests of control,
2. The planned level of control risk for the prescribed procedures of the tested internal control structure,
3. The maximum deviation rate of the prescribed control procedures that will support the planned level of control risk,
4. The permissible risk of the auditor to assess the control risk at too low level,
5. The expected rate of deviation of the population,
6. The desired degree of security of the audit evidence associated with the non-sample-based control tests [12].

As regards the selection of the sample in achieving the objectives of the audit, it should be emphasized that in the testing of controls the sample is not used as a means of audit. The audit standards do not require the use of the audit sample, which relates to the structure of internal control.

6. Risk of using a sample in independent tests

Independent procedures help provide evidence regarding the disclosure of data contained in the financial reports.

There are two types of independent procedures:

1. Tests of details of transactions and conditions - which test the appropriateness of the accounting system for recording transactions, as well as the end-points of accounts, and
2. Analytical procedures - representing comparing and studying the relations between the separate data from the financial reports, trends and projections

Tests that test both control and essential testing are called dual-purpose tests. Audit practice, as well as the risk initiated by the use of the sample in the tests of controls, as well as in the substantive testing, distinguishes two aspects of the risk of using the sample:

- Risk of improper acceptance and
- Risk of incorrect rejection of the available evidence in the audit of material gaps in the presented data.

The first risk, that is, the risk of incorrect acceptance, supports the fact that the bills are not materially misrepresented under conditions when they, de fakto, are materially false.

The second risk, or the risk of incorrect rejection, is supported by the fact that the bills in the accounts are materially misrepresented in circumstances where, de fakto, they are not materially wrong.

If the two aspects of risks are compared, the greatest concern of the auditors is the first risk, the risk of incorrect acceptance, complete control of this risk.

Conclusion

The use of the sample method as a tool in the implementation of the audit process is widely used by the auditors, facilitating their work, no matter what type of audit is conducted and what the object of the analysis is. This method saves time, effort, money, and resources of auditors while researching, while at the same time enabling them to build a high-quality and credible opinion of the information provided in the financial reports.

In the literature, the meaning and role of the sample method in the audit and obtaining the ultimate results from it, as well as a detailed analysis of the method itself from the moment of

planning the sample, sampling from the overall population, the manner of sampling, obtaining results and their measurement and, of course, the presentation of the results obtained. Quality and proper targeting of the auditors' work and at the same time economical, efficient and effective audit will be carried out only with the permanent development of the methods and techniques of sample selection, as well as the application of the other tools in the revision of the financial statements.

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